

REMARKS

Claims 1-44 are pending in the present application.

Reconsideration on the merits is respectfully requested.

The claims are believed to be allowable for the reasons set forth herein. Notice thereof is respectfully requested.

Applicants sincerely appreciate the consideration given to the previous arguments and the withdrawal of the previous rejections based thereon. The new grounds of rejection are believed to be traversed herein.

Claim Rejections - 35 USC § 103

Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thoms WO/0039809 in view of Kano (US Patent 5,012,107).

Thoms is cited as disclosing a phosphor layer, an x-ray absorbing layer and a stimulated light reflecting layer. The Office admits that Thoms does not explicitly disclose a support or substrate layer. The Office argues that other layers are conventional to provide structural support to the phosphor panel. Such a position is contrary to the teachings of Thoms.

Thoms is specific to a dental application wherein the layered structure is bendable to conform to the jaw. (col. 2,

lines 20-22) One of skill in the art would be ill advised to incorporate a substrate since, at least, the bendable function of the device would be eliminated. The Office further opines that it would be obvious to include a support layer, based on Kanos, to provide a robust surface for vapor deposition to occur. This is obviously not a limitation in Thoms since the structure is easily manufactured without the necessity of vapor deposition except to the extent desired to form an aluminum layer. (Col. 2 lines 65-66). The Office is correcting a deficiency which is not shown to exist. Therefore, one of skill in the art has no motivation to modify Thoms to the extent necessary to incorporate a substrate except impermissible hindsight reconstruction based on the present application. Even then such a hindsight reconstruction would be done at the peril of the primary function of the detector of Thoms since the bendability would be compromised.

Kano is cited as teaching a support layer beneath all of the other functional layers. Kanos specifically teaches a light shielding layer and light-scattering layer in succession from the support. (col. 5 lines 37-38) Both of these layers are necessary to achieve the desired resolution and speed. If either layer is lacking the quality of the device is compromised.

If one of skill in the art followed the hindsight reconstruction suggested by the Office they would face a dilemma. If the support of Kano were incorporated into the device of Thoms the function of Thoms would be compromised due to the elimination of the bendability which is a critical feature of the device. If the layer structure of Thoms were incorporated into the device of Kano the quality of the image would be compromised.

The Office has relied on hindsight reconstruction based solely on the presently claimed invention to combine two references which can not be combined without compromising the function of the device of each reference. Furthermore, if one did attempt such a hindsight combination the failure they would be confronted with could only be resolved by experimentation. Even then they would have no basis for a complete alteration of the layer arrangement except by consulting the instant application which is impermissible for establishing an opinion of obviousness.

The rejection of Claims 1-28 under 35 U.S.C. 103(a) as being unpatentable over Thoms WO/0039809 in view of Kano is improper and traversed.

Claims 29-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thoms in view of Kano and further in view of Hell (U.S Patent Publication 2001/0007352).

Claims 29-44 all ultimately depend from claim 1 and carry all limitations of claim 1 and any intervening claim.

Thoms and Kano have been addressed supra and all comments are relevant herein equally. In summary, Thoms and Kano represent hindsight reconstruction motivated only by the present application and, even then, the function of the device of each cited reference would be compromised.

The Office correctly notes that neither Thoms nor Kano disclose a needle shaped phosphor crystal. Hell is relied on for these teachings.

Even with the inclusion of Hell the primary deficiency of Thoms and Kano is not overcome. Hell provides neither motivation to combine the primary references, nor teachings sufficient to lead one of skill in a direction which would render the inoperative combination equivalent to the presently claimed invention.

The inclusion of Hell represents further hindsight reconstruction motivated only by the present disclosure. Such a rejection is improper. Furthermore, even if one did combine the references based on hindsight they would still lack an

embodiment as set forth in the instant claims. There is no teaching of record sufficient to lead one of skill in the art to modify the inoperative combination in such a way as to achieve the claimed invention except for that provided by the instant disclosure. It is well established that a hindsight reconstruction motivated by the disclosure of record is improper even if such a combination would lead directly to the claimed invention. When such a hindsight combination still fails to recite the claimed invention the rejection is even more improper.

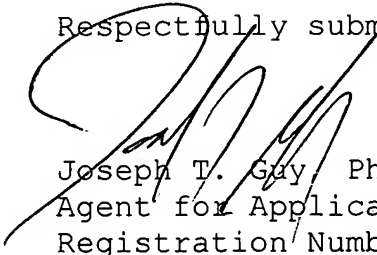
The rejection of 29-44 under 35 U.S.C. 103(a) as being unpatentable over Thoms in view of Kano and further in view of Hell is improperly based only on hindsight reconstruction and, even then, fails to teach the claimed invention. The rejection is traversed.

CONCLUSIONS

Claims 1-44 are pending in the present application. All claims are believed to be in condition for allowance. Notice thereof is respectfully requested.

Respectfully submitted,

December 5, 2006



Joseph T. Gay, Ph.D.
Agent for Applicants
Registration Number 35,172
Customer No.: 46591